process is terminated when its operations are completed, but could have additional steps not included in a figure. A process may correspond to a method, a function, a procedure, a subroutine, a subprogram, etc. When a process corresponds to a function, its termination can correspond to a return of the function to the calling function or the main function.

The term "computer-readable medium" includes, but is not limited to portable or fixed storage devices, optical storage devices, wireless channels and various other mediums capable of storing, containing, or carrying instruction(s) and/or data. A code segment or machine-executable instructions may represent a procedure, a function, a subprogram, a program, a routine, a subroutine, a module, a software package, a class, or any combination of instructions, data structures, or program statements. A code segment may be coupled to another code segment or a hardware circuit by passing and/or receiving information, data, arguments, parameters, or memory contents. Information, arguments, parameters, data, etc., may be passed, forwarded, or transmitted via any suitable means including memory sharing, message passing, token passing, network transmission, etc.

Furthermore, embodiments may be implemented by hardware, software, firmware, middleware, microcode, hardware description languages, or any combination thereof. When implemented in software, firmware, middleware or microcode, the program code or code segments to perform the necessary tasks may be stored in a machine readable medium. A processor(s) may perform the necessary tasks.

In the foregoing specification, aspects of the invention are described with reference to specific embodiments thereof, but those skilled in the art will recognize that the invention is not limited thereto. Various features and aspects of the above-described invention may be used individually or jointly. Further, embodiments can be utilized in any number of environments and applications beyond those described herein without departing from the broader spirit and scope of the specification. The specification and drawings are, accordingly, to be regarded as illustrative rather than restrictive.

Additionally, for the purposes of illustration, methods were described in a particular order. It should be appreciated that in alternate embodiments, the methods may be performed in a different order than that described. It should also be appreciated that the methods described above may be performed by hardware components or may be embodied in sequences of machine-executable instructions, which may be used to cause a machine, such as a general-purpose or special-purpose processor or logic circuits programmed with the instructions to perform the methods. These machine-executable instructions may be stored on one or more machine readable mediums, such as CD-ROMs or other type of optical disks, floppy diskettes, ROMs, RAMs, EPROMs, EEPROMs, magnetic or optical cards, flash memory, or other types of machine-readable mediums suitable for storing electronic instructions. Alternatively, the methods may be performed by a combination of hardware and software.

What is claimed is:

1. A method of monitoring physical characteristics of subjects in sleep environments, the method comprising: receiving, through a video camera, a video feed of a subject in a sleep environment; analyzing the video feed of the subject to identify motion of the subject in the video feed that is below a threshold amount of motion; generating a displacement map for pixels moving below the threshold amount of motion, wherein the displacement map comprises values indicating a distance by which the pixels in a previous frame have moved in relation to a current frame; and causing a mobile device to present a representation of the motion of the subject, wherein the motion of the subject that is below the threshold amount of motion is exaggerated by: scaling the values in the displacement map; altering pixel locations in the video feed based on the displacement map after scaling the values in the displacement map; and displaying the pixels with altered locations in an overlaid fashion in the video feed.

2. The method of claim **1**, wherein analyzing the video feed of the subject to identify motion of the subject in the video feed comprises identifying motions of the subject that are repeated.

3. The method of claim **1**, wherein analyzing the video feed of the subject to identify the motion of the subject in the video feed comprises analyzing the video feed of the subject to identify motion of the subject in the video feed comprises identifying motions of the subject that are repeated and less than a threshold amount of motion.

4. The method of claim **1**, wherein analyzing the video feed further comprises identifying an area in a field-of-view of the camera that includes the motion of the subject.

5. The method of claim **4**, wherein analyzing the video feed further comprises reducing a resolution of the video feed outside of the area.

6. The method of claim **1**, wherein the motion of the subject in the video feed comprises a rhythmic breathing motion.

7. The method of claim **1**, wherein the motion of the subject in the video feed comprises a chest rising and falling with a heartbeat of the subject.

8. A system for monitoring physical characteristics of subjects in sleep environments, the system comprising: a video camera; one or more processors; and one or more memory devices comprising instructions that, when executed by the one or more processors, cause the one or more processors to perform operations comprising: receiving, through a video camera, a video feed of a subject in a sleep environment; analyzing the video feed of the subject to identify motion of the subject in the video feed that is below a threshold amount of motion; generating a displacement map for pixels moving below the threshold amount of motion, wherein the displacement map comprises values indicating a distance by which the pixels in a previous frame have moved in relation to a current frame; and causing a mobile device to present a representation of the motion of the subject, wherein the motion of the subject that is below the threshold amount of motion is exaggerated by: scaling the values in the displacement map; altering pixel locations in the video feed based on the displacement map after scaling the values in the displacement map; and displaying the pixels with altered locations in an overlaid fashion in the video feed.

9. The system of claim **8**, wherein the mobile device comprises a smart phone.

10. The system of claim **8**, further comprising a monitor server, wherein the one or more processors are at least partially located at the monitor server.

11. The system of claim **8**, wherein the representation of the motion of the subject comprises a pulsating graphic to be displayed on the mobile device where the pulsating is based on a timing of the motion of the subject.

12. The system of claim **8**, wherein the representation of the motion of the subject comprises a rhythmic audio output that is based on a timing of the motion of the subject.